

[0009] FIG. 2 illustrates the example system of FIG. 1 with additional detail relating to a generation of application data;

[0010] FIG. 3 illustrates the example system of FIG. 1 with additional detail relating to a generation of control signals effective to control energy flow;

[0011] FIG. 4 illustrates the example system of FIG. 1 with additional detail relating to control of a distribution of energy;

[0012] FIG. 5 illustrates a flow diagram for an example process to implement an energy flow controller;

[0013] FIG. 6 illustrates an example computer program product that can be utilized to implement an energy flow controller; and

[0014] FIG. 7 is a block diagram illustrating an example computing device that is arranged to implement an energy flow controller;

[0015] all arranged according to at least some embodiments described herein.

DETAILED DESCRIPTION

[0016] In the following detailed description, reference is made to the accompanying drawings, which form a part hereof. In the drawings, similar symbols typically identify similar components, unless context dictates otherwise. The illustrative embodiments described in the detailed description, drawings, and claims are not meant to be limiting. Other embodiments may be utilized, and other changes may be made, without departing from the spirit or scope of the subject matter presented herein. It will be readily understood that the aspects of the present disclosure, as generally described herein, and illustrated in the Figures, can be arranged, substituted, combined, separated, and designed in a wide variety of different configurations, all of which are explicitly contemplated herein.

[0017] Briefly stated, technologies effective to control a distribution of energy from an energy source to a first device and to a second device are generally described. In some examples, the first and second devices may be cellular phones, computers, etc. In some examples, a controller may receive first device data and second device data, from the first device and the second device, respectively. The first device data may indicate first energy consumption by the first device and a first current energy quantity of the first device. For example, the first device data may indicate a first number of device applications being executed and/or suspended by the first device, a first routine that relates to executions of the device applications by the first device, and a first battery type of a first battery of the first device, etc. The second device data may indicate second energy consumption by the second device and a second current energy quantity of the second device. For example, the second device data may indicate a second number of device applications being executed and/or suspended by the second device, a second routine that relates to executions of the device applications by the second device, and a second battery type of a second battery of the second device, etc. The controller may evaluate the received first and second device data in order to determine whether the first and second devices require energy, which device may be prioritized to receive energy, which device may not need energy, etc. The controller may control a first switch and a second switch, based on the first and second device data, to allow a first transmission of first energy from the energy source to

the first device, and to interrupt a second transmission of second energy from the energy source to the second device. For example the controller may generate control signals based on the evaluations of the first and second device data, where the controls signals may be effective to control the first and second switches in order to allow and/or interrupt transmission of energy to the first and second devices.

[0018] FIG. 1 illustrates an example system 100 that can be utilized to implement an energy flow controller, arranged in accordance with at least some embodiments described herein. System 100 may be implemented with an energy controller 110. As will be described in more detail below, system 100 may be implemented such that energy controller 110 may control a distribution of energy 104 to devices 132 (including device 132a, 132b) based on device data 138 (including device data 138a, 138b), where device data 138 may be provided by or received from devices 132. Energy 104 may be energy supplied by an energy source 102 such as a generator, a battery, etc. In some examples, energy source 102 may be a component, such as a battery, of energy controller 110 and may be disposed inside or as part of energy controller 110. Devices 132 may include cellular phones, computers, etc. In some examples, energy controller 110 may control the distribution of energy 104 to devices 132 by, for example, allowing energy 104 to be transmitted to devices 132 from energy source 102. In some examples, energy controller 110 may control the distribution of energy 104 to devices 132 by interrupting a transmission of energy 104 to devices 132 from energy source 102. In some examples, energy controller 110 may control the distribution of energy 104 to devices 132 by instructing device 132a to transmit energy to device 132b.

[0019] Energy controller 110 and energy source 102 may be configured to be in communication with each other. Energy controller 110 may include an interface module 112, a processing module 114, a control module 116, and/or a memory 118. Interface module 112, processing module 114, and/or control module 116 may be configured to be in communication with each other. Processing module 114 may be configured to be in communication with memory 118. Interface module 112 may include one or more interfaces effective to electrically connect devices 132 to energy controller 110 and/or energy source 102. In the example depicted, interface module 112 may include interfaces 113 (including interfaces 113a, 113b) where each interface 113 may be a particular type of interface. For example, interface 113a may be an AC (Alternating Current) socket, and interface 113b may be a USB (Universal Serial Bus) socket. In the example, device 132a may connect to interface 113a through a connector 136a in order to connect to energy controller 110 and/or access energy source 102. Similarly, device 132b may connect to interface 113b through a connector 136b in order to connect to energy controller 110 and/or access energy source 102. In some examples, interface module 112 may include electronic circuits, such as integrated circuits, and/or sensors (further described below), configured to facilitate detection of devices 132 that may be connected to energy controller 110.

[0020] Processing module 114 may include integrated circuits such as FPGA (Field Programmable Gate Array), SoC (System on Chip), etc. In examples where devices 132 are connected to energy controller 110, processing module 114 may receive device data 138 from devices 132 through interface module 112. As further described below, each item